

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF APPEALS

H21 DAV 103

Serial No. 09/658,509

Filing Date: SEPTEMBER 8, 2000

For: BICYCLE STEM FOR ENLARGED HANDLEBAR PORTIONS AND

ASSOCIATED METHODS

Examiner: C. KIM

Art Unit: 3682

Attorney Docket No. 57012

APPELLANT'S APPEAL BRIEF

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Sir:

Submitted herewith is Appellant's Appeal Brief (in triplicate). Authorization is given to charge the requisite \$165.00 fee for filing a brief to Deposit Account No. 01-0484. If any additional extension and/or fee is required, or if any additional fee for claims is required, charge Account No. 01-0484.

(1) REAL PARTY IN INTEREST

The real party in interest for the present application is the assignee, L.H. Thompson Company, Inc.

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(2) RELATED APPEALS AND INTERFERENCES

Co-pending application No. 09/658,389 filed September 8, 2000 by the present assignee, includes a provisional obviousness-type double patenting rejection which may directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal. There are no other related appeals or interferences for the present application.

(3) STATUS OF CLAIMS

Claims 1-4, 6-14 and 16-27 are pending in the present application and all are rejected. Accordingly, all of Claims 1-4, 6-14 and 16-27 are the subject of this appeal.

(4) STATUS OF AMENDMENTS

No amendments were proposed after the final Office Action of May 1, 2003. The claims in the Appendix incorporate all prior amendments.

(5) CONCISE SUMMARY OF THE INVENTION

The present invention is directed to a bicycle stem 30 for connecting a bicycle handlebar to a bicycle steering tube.

Referring to FIGS. 19 to 25, advantageous features of the stem will be described, particularly as relating to the handlebar clamping portion 32 and its associated handlebar clamp member 50.

In particular, a conventional handlebar 60 as illustrated (FIG. 19, reproduced below) includes a pair of nominal diameter tubular portions 61a, 61b connected together at a central gripping or clamping portion 62. Moreover, the gripping or

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clamping portion 62 may be tapered, such as to present an enlarged diameter or slightly larger diameter portion 63 at a medial position thereof. Attempting to clamp uniformly across the entire extent of the tapered or enlarged diameter portion 63 may present difficulties, and strength and/or torsional rigidity of the stem may then be compromised.

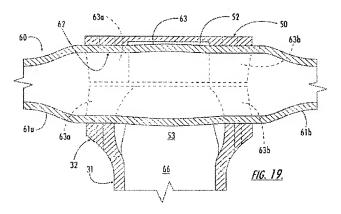


FIG. 19

The illustrated stem 30 includes the handlebar clamping member 50 which cooperates with the handlebar clamping portion 33 to clamp the bicycle handlebar 60 therebetween. The handlebar clamping member 50 may be secured by one or more removable fasteners so as to be completely removable from the handlebar clamping portion 32, to thereby facilitate installation of the handlebar 60.

The handlebar clamping member 50 and the handlebar clamping portion 32 have respective cavities 53, 52 in respective medial portions thereof to accommodate the enlarged diameter medial portion 63 of the handlebar 60. The handlebar clamping member 50 in the illustrated embodiment has a generally rectangular

shape with a semi-cylindrical recess 70 (see, e.g. FIG. 24) formed therein for receiving and engaging the handlebar 60. The semi-cylindrical recess 70 and medial cavity 63 thus define two arcuate contact bands or areas 63a, 63b for tightly engaging the handlebar 60 at spaced apart locations. Indeed these spaced apart contact bands 63a, 63b illustratively extend to the outer edges of the stem 30.

Similarly, the handlebar clamping portion 32 includes a semi-cylindrical recess therein, which, in combination with its medial cavity 53, defines a corresponding pair of arcuate contact bands or areas 63a, 63b which are also spaced from one another to the edges of the stem 30. Accordingly, a rigid and strong connection can be made from the stem 30 to the handlebar 60, such as to reduce torsional rotation during riding, which would otherwise occur to sap the rider's energy.

In the embodiment, the body portion 31 has a tubular shape with a hollow interior 66. The cavity 53 of the handlebar clamping portion 32 has an opening therein in communication with the hollow interior 66 of the body portion. Accordingly, weight can be reduced without compromising strength.

(6) ISSUES

The issues presented on appeal are: whether Claims 1-4, 6-14 and 16-27 are patentable under 35 U.S.C. §103 over the combination of Giard (U.S. 6,058,800) and Jeshurun et al. (U.S. 5,165,301) and Lai et al. (U.S. 5,509,328), or the combination of Roddy (U.S. 5,881,606), Jeshurun and Giard, taken together or with Lai; and whether Claims 1-4, 6-14 and 16-27 are patentable under the doctrine of obviousness-type double patenting over

Claims 1,3, 15, 24, 27, 31, 33, 35, 38, 40, 43 and 45 of copending application No. 09/658,389 in view of Roddy, Jeshurun and Giard.

(7) GROUPING OF CLAIMS

For the purposes of addressing the rejections under 35 U.S.C. §103 and obviousness-type double patenting, the grouping of the claims is: Claims 1-4, 6-14 and 16-27 stand or fall together as a group.

(8) ARGUMENTS

A) Patentability under 35 U.S.C. §103

Claims 1-4, 6-14 and 16-2 were rejected under 35 U.S.C. §103 in view of Giard or Roddy, in various combinations with Jeshurun et al. and Lai for the reasons set forth on pages 4-13 of the Office Action. Appellants contend that Claims 1-4, 6-14 and 16-27 clearly define over the cited references, and in view of the following remarks, reversal of the Examiner is requested.

The claimed invention, as recited in independent Claims 1 and 11, for example, is directed to a bicycle stem and at least includes a handlebar clamping portion, having a first arcuate extent, and a handlebar clamping member, having a second arcuate extent, and cooperating with the handlebar clamping portion to clamp the bicycle handlebar therebetween. The handlebar clamping member and handlebar clamping portion each have a recess for the handlebar and a cavity in a respective medial portion of the recess to accommodate an enlarged diameter portion of the handlebar. The cavity in the recess of the handlebar clamping portion extends fully over the first arcuate

extent thereof, and the cavity in the recess of the handlebar clamping member extending fully over the second arcuate extent thereof. The stem has a tubular and hollow body while the cavity of the handlebar clamping portion has an opening therein in communication with the hollow interior of the body.

Similarly, independent Claim 20 recites that the handlebar clamping member has a recess therein for the handlebar and the cavity is in the medial portion of the recess. Further, the handlebar clamping portion has a recess for the handlebar and an opening in a medial portion of the recess in communication with interior of the hollow body. The cavity in the recess of the handlebar clamping member extends fully over the arcuate extent thereof.

The Examiner has now relied on the combination of Giard, Jeshurun and Lai or the combination of Roddy, Jeshurun and Giard taken together or with Lai to allegedly meet the requirements of the claimed invention. Appellants will address each combination separately below.

As mentioned above, Claims 1, 11 and 20 set forth that the body is tubular and hollow, and that the cavity in the recess of the handlebar clamping member extends fully over the second arcuate extent thereof. With respect to the combination of Giard and Jeshurun et al., the Examiner points to Giard for the disclosure of a stem with a handlebar clamping portion and a handlebar clamping member (e.g. Figs. 4 and 5 of Giard, reproduced below), while pointing to Jeshurun as teaching the use of a clamp with a centered groove to accommodate an annular ridge of a stem mounting section of a handlebar. The Examiner then asserts that it would have been obvious to modify the

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clamping device of Giard with the centered groove of Jeshurun to arrive at the claimed invention.

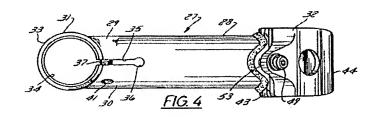


FIG.4 of Giard

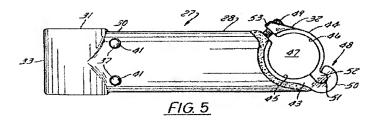


FIG.5 of Giard

However, as discussed in column 4, lines 4-6 and lines 34-37 of the Giard patent (referring to Figs. 4 and 5 of Giard, for example), a "primary advantage" of the clamping device of Giard is the use of only a single fastener 49 which is centered at the edge of the cover member 44 and the end portion 43. The Examiner's proposed modification of the Giard clamping device to include a centered groove as taught by Jeshurun would render the Giard device unsatisfactory for its intended advantage because the use of a single centered fastener would be prevented. As the Examiner and Board are aware, if a proposed modification would render the prior art invention being modified unsatisfactory for

its intended purpose, then there is no suggestion or motivation to make the proposed modification (MPEP §2143).

Furthermore, with respect to the combination of Roddy, Jeshurun and Giard, the Examiner points to Roddy for the disclosure of a solid clamping device having a handlebar clamping member and clamping portion (e.g. as seen in FIG. 2 of Roddy, reproduced below) while pointing to Jeshurun as teaching the use of a clamp with a centered groove to accommodate an annular ridge of a stem mounting section of a handlebar, and while relying on Giard as teaching the use of a tubular hollow body in communication with an opening in a recess of a handlebar clamping portion. The Examiner then asserts that it would have been obvious to modify the clamping device of Roddy with the centered groove of Jeshurun, and then further modify that combination to include the hollow tubular body and opening in the handlebar clamping portion of Giard to arrive at the claimed invention.

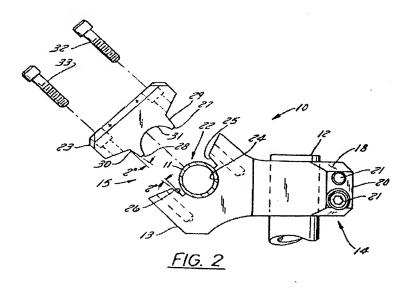


FIG.2 of Roddy

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However, as discussed in column 2, lines 14-21 of Roddy, an advantage of the Roddy clamping device is the coverage and engagement of a greater surface area of the circumference of the handlebar. The Examiner's proposed modification of the Roddy clamping device to include a tubular hollow body having an opening in the handlebar clamping portion would render the Roddy device unsatisfactory for its intended advantage because the coverage and engagement of a greater surface area of the circumference of the handlebar would be impeded. Again, a proposed modification cannot render the prior art invention unsatisfactory for its intended purpose. Furthermore, Roddy specifically teaches away from such a modification.

Additionally, in Giard, the opening in the handlebar clamping portion relied upon by the Examiner is not described or discussed at all in the reference. Although, the opening is shown in Figs. 9 and 11 of Giard, the reference provides no indication of any advantages or need for the opening. Indeed, the Giard reference actually discusses the desirability of providing a uniform clamping surface by eliminating spaces or gaps in wall sections of a clamp (Col. 2). The Examiner continues to assert that the skilled artisan would have been motivated to modify the solid clamping device of Roddy to include the hollow tubular body and opening in the handlebar clamping portion as shown in Giard, but cannot point to any teaching in the references to do so.

As the Examiner and Board are also aware, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination.

Moreover, the Examiner (e.g. page 6 of the final Office Action) has relied upon the Jeshurun patent as allegedly teaching the use of a clamping device with a "cavity in the recess of the handlebar clamping portion extending fully over a first arcuate extent" thereof. However, Appellants point out that the Jeshurun patent does not even include any drawings or detailed discussion of such a clamping device and merely teaches (Col. 3, lines 17-21) that the clamp would include "a centered groove to accommodate the annular ridge" of the handlebar. Without any disclosure of structure of the handlebar clamping device in Jeshurun, the Examiner's assertion that the Jeshurun patent discloses a clamping device with a "cavity in the recess of the handlebar clamping portion extending fully over a first arcuate extent" is clearly a mis-statement of the actual teachings of the reference.

The Lai patent was relied upon by the Examiner for the teaching of a pair of side-by-side clamp members for a steering tube, as claimed in Claims 9, 10, 18, 19, 26 and 27. Without discussing the details of Lai, it is sufficient to note that nothing in the Lai patent teaches or suggests the use of a recess for the handlebar and a cavity in a respective medial portion of the recess to accommodate an enlarged diameter portion of the handlebar, as discussed above.

In sum, there is simply no teaching or suggestion in the cited references to provide the combination of features as claimed. Specifically, there is no teaching or suggestion in the cited references to provide a handlebar clamping member and handlebar clamping portion each having a recess for the handlebar and a cavity in a respective medial portion of the

recess to accommodate an enlarged diameter portion of the handlebar, wherein the cavity in the recess of the handlebar clamping member extends fully over the arcuate extent thereof, and wherein the stem has a tubular and hollow body while the cavity of the handlebar clamping portion has an opening therein in communication with the hollow interior of the body.

Accordingly, for at least the reasons given above, Appellants maintain that the cited references do not disclose or fairly suggest the invention as set forth in Claims 1, 11 and 20. Furthermore, no proper modification of the teachings of these references could result in the invention as claimed. Thus, the rejections under 35 U.S.C. §103 should be withdrawn.

It is respectfully submitted that independent Claims 1, 11, and 20 are patentable for the reasons detailed above. In view of the patentability of the independent claims, it is also submitted that their dependent claims, which recite yet further distinguishing features, are also patentable. These dependent claims require no further discussion herein.

B) The Obviousness-type Double Patenting Rejection

The Examiner also issued a non-statutory double patenting rejection of Claims 1-4, 6-14 and 16-27. More particularly, the Examiner asserts that the claims are unpatentable over Claims 1, 3, 15, 24, 27, 31, 33, 35, 38, 40, 43, and 45 of copending Application No. 09/658,389 in view of the Roddy patent, the Jeshurun patent and in view of the Giard patent.

Appellants respectfully disagree with the Examiner and submit that the present application and the co-pending patent application are directed to patentably distinct aspects of the

bicycle stem. More specifically, although the disclosures of the applications are substantially identical, the claims of the present application are directed to the details of a handlebar clamping portion of the bicycle stem. The claims of the above-referenced co-pending application, however, are directed to the details of a steering tube clamping portion of a bicycle stem. This is located at the opposite end of the stem body and used to clamp a completely different bicycle component.

Furthermore, independent Claims 1, 11 and 20 define a cavity in the recess of the handlebar clamping portion extending fully over the first arcuate extent thereof, and/or that the cavity in the recess of the handlebar clamping member extends fully over the second arcuate extent thereof. These features are neither claimed in the co-pending application nor taught by the cited references as discussed above.

Accordingly, it is requested that the double patenting rejection be withdrawn. Alternatively, Appellants request that the rejection be held in abeyance until the claims are otherwise in condition for allowance, at which time Appellants will submit a terminal disclaimer.

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CONCLUSIONS

In view of the substantive arguments presented above, it is submitted that all of the claims, namely Claims 1-4, 6-14 and 16-27 are patentable over the prior art. Accordingly, Appellants respectfully request that all of the rejections be reversed.

Respectfully submitted,

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CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents P.O. Box 1450, Alexandria, VA 22313-1450, on this 6th day of October, 2003.

APPENDIX INCLUDING THE CLAIMS ON APPEAL FOR U.S. PATENT APPLICATION SERIAL NO. 09/658,509

1. (previously presented) A bicycle stem for connecting a bicycle handlebar to a bicycle steering tube, the bicycle stem comprising:

a body portion having a tubular shape with a hollow interior and opposing first and second ends;

a handlebar clamping portion having a first arcuate extent and connected to the first end of said body portion;

a handlebar clamping member having a second arcuate extent and cooperating with said handlebar clamping portion to clamp the bicycle handlebar therebetween;

said handlebar clamping member and said handlebar clamping portion each having a recess for the handlebar and a cavity in a respective medial portion of the recess to accommodate an enlarged diameter portion of the handlebar, the cavity in said recess of said handlebar clamping portion extending fully over the first arcuate extent thereof, and the cavity in said recess of said handlebar clamping member extending fully over the second arcuate extent thereof, wherein the cavity of said handlebar clamping portion has an opening therein in communication with the hollow interior of said body portion;

at least one fastener for securing said handlebar clamping member to said handlebar clamping portion; and

a steering tube clamping portion connected to the second end of said body portion.

- 2. (previously presented) A bicycle stem according to Claim 1 wherein said handlebar clamping member has a generally rectangular shape with said recess therein defining with the cavity a pair of spaced apart contact areas for contacting the handlebar.
- 3. (original) A bicycle stem according to Claim 1 wherein said handlebar clamping member is removable from said handlebar clamping portion.
- 4. (previously presented) A bicycle stem according to Claim 1 and wherein said recess of said handlebar clamping portion defines with the cavity a pair of spaced apart contact areas for contacting the handlebar.
 - 5. (canceled).
- 6. (original) A bicycle stem according to Claim 1 wherein said handlebar clamping member and said handlebar clamping portion both have generally rectangular shapes overlying one another.
- 7. (original) A bicycle stem according to Claim 6 wherein said at least one fastener comprises respective fasteners securing corners of said handlebar clamping member and said handlebar clamping portion together.

- 8. (original) A bicycle stem according to Claim 1 wherein said body portion, handlebar clamping portion and steering tube clamping portion are integrally formed as a monolithic unit.
- 9. (original) A bicycle stem according to Claim 1 wherein said steering tube clamping portion has a tubular shape defining a steering tube receiving passageway therethrough, and wherein said steering tube clamping portion also has a clamp receiving passageway therein transverse to the steering tube receiving passageway and in communication therewith.
- 10. (original) A bicycle stem according to Claim 9 further comprising a steering tube clamp in the clamp receiving passageway and comprising a pair of cooperating clamp members aligned in side-by-side relation and comprising respective portions defining a recess therein for the steering tube.
- 11. (previously presented) A bicycle stem for connecting a bicycle handlebar to a bicycle steering tube, the bicycle stem comprising:
- a body portion having a tubular shape with a hollow interior;
- a handlebar clamping portion having a first arcuate extent and connected to an end of said body portion and having a generally rectangular shape;
- a handlebar clamping member having a second arcuate extent and having a generally rectangular shape aligned with

said handlebar clamping portion and cooperating therewith to clamp the bicycle handlebar therebetween;

said handlebar clamping member and said handlebar clamping portion each having a recess for the handlebar and a cavity in a respective medial portion of the recess to accommodate an enlarged diameter portion of the handlebar, the cavity in said recess of said handlebar clamping portion extending fully over the first arcuate extent thereof, and the cavity in said recess of said handlebar clamping member extending fully over the second arcuate extent thereof, and wherein the cavity of said handlebar clamping portion has an opening therein in communication with the hollow interior of said body portion; and

respective fasteners for securing corners of said handlebar clamping member and said handlebar clamping portion together.

- 12. (previously presented) A bicycle stem according to Claim 11 wherein said recess of said handlebar clamping member defines with the cavity a pair of spaced apart contact areas for contacting the handlebar.
- 13. (original) A bicycle stem according to Claim 11 wherein said handlebar clamping member is removable from said handlebar clamping portion.
- 14. (previously presented) A bicycle stem according to Claim 11 and wherein said recess of said handlebar clamping

portion defines with the cavity a pair of spaced apart contact areas for contacting the handlebar.

15. (canceled).

- 16. (original) A bicycle stem according to Claim 11 further comprising a steering tube clamping portion connected to an end of said body portion opposite said handlebar clamping portion.
- 17. (original) A bicycle stem according to Claim 16 wherein said body portion, handlebar clamping portion and steering tube clamping portion are integrally formed as a monolithic unit.
- 18. (original) A bicycle stem according to Claim 16 wherein said steering tube clamping portion has a tubular shape defining a steering tube receiving passageway therethrough, and wherein said steering tube clamping portion also has a clamp receiving passageway therein transverse to the steering tube receiving passageway and in communication therewith.
- 19. (original) A bicycle stem according to Claim 18 further comprising a steering tube clamp in the clamp receiving passageway and comprising a pair of cooperating clamp members aligned in side-by-side relation and comprising respective portions defining a recess therein for the steering tube.

20. (previously presented) A bicycle stem for connecting a bicycle handlebar to a bicycle steering tube, the bicycle stem comprising:

a body portion having a tubular shape defining a hollow interior;

a handlebar clamping portion having a first arcuate extent and connected to an end of said body portion and having a recess therein for the handlebar, said handlebar clamping portion further having an opening in a medial portion of the recess in communication with the hollow interior of said body portion;

a handlebar clamping member having a second arcuate extent and cooperating with said handlebar clamping portion to clamp the bicycle handlebar therebetween, said handlebar clamping member having a recess for the handlebar and a cavity in a medial portion of the recess, the cavity in said recess of said handlebar clamping member extending fully over the second arcuate extent thereof; and

at least one fastener for securing said handlebar clamping member to said handlebar clamping portion.

- 21. (original) A bicycle stem according to Claim 20 wherein said handlebar clamping member is removable from said handlebar clamping portion.
- 22. (original) A bicycle stem according to Claim 20 wherein said handlebar clamping member and said handlebar clamping portion both have generally rectangular shapes overlying one another.

- 23. (original) A bicycle stem according to Claim 22 wherein said at least one fastener comprises respective fasteners securing corners of said handlebar clamping member and said handlebar clamping portion together.
- 24. (original) A bicycle stem according to Claim 20 further comprising a steering tube clamping portion connected to an end of said body portion opposite said handlebar clamping portion.
- 25. (original) A bicycle stem according to Claim 24 wherein said body portion, handlebar clamping portion and steering tube clamping portion are integrally formed as a monolithic unit.
- 26. (original) A bicycle stem according to Claim 24 wherein said steering tube clamping portion has a tubular shape defining a steering tube receiving passageway therethrough, and wherein said steering tube clamping portion also has a clamp receiving passageway therein transverse to the steering tube receiving passageway and in communication therewith.
- 27. (original) A bicycle stem according to Claim 26 further comprising a steering tube clamp in the clamp receiving passageway and comprising a pair of cooperating clamp members aligned in side-by-side relation and comprising respective portions defining a recess therein for the steering tube.